

REMARKS**Summary of the Office Action**

In the Office Action, the specification and claims have been objected to for various informalities.

Claims 19 and 20 stand rejected under 35 U.S.C. § 102 (b) as being anticipated by the reference “Modeling of Coil Springs Using Parallel Mechanisms,” 2000 to Kumagai (hereinafter *Kumagai*), cited with the Information Disclosure Statement filed with the original application.

Claims 1-6, 8-18 and 21-23 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over *Kumagai* in view of “Instrumentation for Engineers and Scientists,” 1999 to Turner (hereinafter *Turner*).

Claim 7 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over *Kumagai* in view of *Turner*, and further in view of U.S. Patent No. 5,797,191 to *Ziegert*.

Summary of the Response to the Office Action

Applicant proposes amending the specification and claims 1, 4, 5, 10 and 14-16. Based on the arguments presented below, claims 1-22 are pending for further consideration.

Objection to the Specification

In the Office Action, the disclosure has been objected to for not displaying the side force 26.

Applicant respectfully notes that formal Fig. 1 provided with the Amendment filed on February 7, 2006 included side force 26. Moreover, Paragraph [0037] has now been amended to reference Fig. 1.

Applicant therefore respectfully requests withdrawal of the objection to the disclosure.

Objection to the Claims

In the Office Action, claims 4, 10, 12 and 14 have been objected to various informalities.

Applicant proposes amending claims 4 and 10 as requested in the Office Action.

Applicant therefore respectfully requests withdrawal of the objection to claims 4, 10, 12 and 14.

35 U.S.C. 112, 2nd Paragraph Rejections

In the Office Action, claims 1-3, 5 and 14-18 stand rejected under 35 U.S.C. 112, 2nd Paragraph as being indefinite.

Applicant proposes amending claims 1, 5 and 14-16 as requested in the Office Action.

Moreover, with regard to claim 16 and 18, the Office Action indicates that the use of the trademark/trade names MARC or ADAMS is indefinite. In this regard, Applicant respectfully notes that per the Amendment filed on February 7, 2006, claims 16 and 18 were amended to recite the specific type of MARC or ADAMS software (i.e. software for computing the force and torque vectors, or simulation software).

Applicant therefore respectfully requests withdrawal of the 35 U.S.C. 112, 2nd Paragraph rejection of claims 1-3, 5 and 14-18.

35 U.S.C. 101 Rejection

In the Office Action, claims 1-18 stand rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

In this regard, Applicant respectfully notes the invention is directed to a method and apparatus for modeling coil springs. This is clearly useful in that the invention can be used to simulate coil spring behavior for testing an automobile spring and suspension system without making actual test coil springs. The simulation results may be used to manufacture an actual coil spring for a particular automobile, thus saving the time, expense and trial-and-error technique of designing an appropriate coil spring for an automobile.

Applicant therefore respectfully requests withdrawal of the 35 U.S.C. 101 rejection of claims 1-18 as being directed to non-statutory subject matter.

All Claims are Allowable

In the Office Action, claims 19 and 20 stand rejected under 35 U.S.C. § 102 (b) as being anticipated by the reference "Modeling of Coil Springs Using Parallel Mechanisms," 2000 to Kumagai (hereinafter *Kumagai*), cited with the Information Disclosure Statement filed with the original application. Claims 1-6, 8-18 and 21-23 stand rejected under 35 U.S.C. § 103 (a) as

being unpatentable over *Kumagai* in view of “Instrumentation for Engineers and Scientists,” 1999 to Turner (hereinafter *Turner*). Claim 7 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over *Kumagai* in view of *Turner*, and further in view of U.S. Patent No. 5,797,191 to *Ziegert*. Applicant respectfully traverses these rejections for the following reasons.

Applicant believes that the *Kumagai* (01PC-81) reference should be withdrawn.

Kumagai Reference

With regard to the citation of *Kumagai* (01PC-81), Applicant incorrectly listed the year 2000 as the publication date of *Kumagai* (01PC-81) with the Information Disclosure Statement filed on May 9, 2002 with the original application, and therefore, *Kumagai* (01PC-81) is not available as a reference for the reasons indicated below.

Specifically, Applicant encloses herewith a published copy of *Kumagai* (2001-01-0496).

Kumagai (01PC-81) was cited in the Information Disclosure Statement of May 9, 2002 as having a publication date of 2000. This publication date is incorrect, and in fact, *Kumagai* (01PC-81) was published in the March 5-8, 2001 SAE Technical Paper Series as *Kumagai* (2001-01-0496). Thus the actual publication date of *Kumagai* (2001-01-0496) of March 5-8, 2001 is within one year of the December 18, 2001 filing date of Provisional Application No. 60/341,681, to which the present application claims priority.

The Copyright 2000 date on *Kumagai* (01PC-81) was part of the standard SAE Paper layout used when writing the paper and later submitting to SAE for publication. SAE then accepts the paper and publishes for the World Congress. When SAE does this, they assign the paper number (draft number changes from 01PC-81 to 2001-01-0496 for example) and they add the title page and all of the proper legal copyright/publication information including updating the Copyright line above the Abstract section.

Kumagai (2001-01-0496) has now been correctly cited in the concurrently filed Information Disclosure Statement.

Moreover, since *Kumagai* (2001-01-0496) includes at least authors Shinichi Nishizawa, Maiko Ikeda, Toru Tom Sugiyama and Hideto Enomoto which are listed as the inventors of the present application, Provisional Application No. 60/341,681 was timely filed within one-year from the earliest publication date of *Kumagai* (2001-01-0496).

Hamano Reference

Likewise, with regard to *Hamano* (01PC-167), Applicant incorrectly listed in Paragraph [0040] of the original specification *Hamano* (01PC-167) being published in 2000, and therefore, *Hamano* (01PC-167) is not available as a reference for the reasons indicated below.

Specifically, Applicant encloses herewith a published copy of *Hamano* (2001-01-0497).

The indicated 2000 publication date of *Hamano* (01PC-167) is incorrect, and in fact, *Hamano* (01PC-167) was published in the March 5-8, 2001 SAE Technical Paper Series as *Hamano* (2001-01-0497). Thus the actual publication date of *Hamano* (2001-01-0497) of March 5-8, 2001 is within one year of the December 18, 2001 filing date of Provisional Application No. 60/341,681, to which the present application claims priority.

As discussed above, the Copyright 2000 date on *Hamano* (01PC-167) was part of the standard SAE Paper layout used when writing the paper and later submitting to SAE for publication. SAE then accepts the paper and publishes for the World Congress. When SAE does this, they assign the paper number (draft number changes from 01PC-167 to 2001-01-0497 for example) and they add the title page and all of the proper legal copyright/publication information including updating the Copyright line above the Abstract section.

Hamano (2001-01-0497) has now been correctly cited in the concurrently filed Information Disclosure Statement.

Moreover, since *Hamano* (2001-01-0497) includes at least authors Shinichi Nishizawa, Maiko Ikeda and Hideto Enomoto which are listed as the inventors of the present application, Provisional Application No. 60/341,681 was timely filed within one-year from the earliest publication date of *Hamano* (2001-01-0497).

Based on the above, Applicant respectfully asserts that since *Kumagai* (and *Hamano*) are not available as references, claims 1-22 would be allowable over *Kumagai*.

CONCLUSION

In view of the foregoing, Applicant respectfully requests reconsideration and the timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding

after consideration of the response, the Examiner is invited to contact the Applicant's undersigned representative to expedite prosecution.

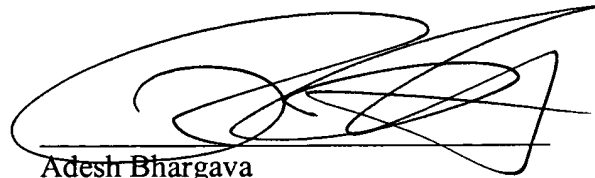
If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 04-2223. If a fee is required for an extension of time under 37 C.F.R. §1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

DYKEMA GOSSETT PLLC

Dated: September 7, 2006

By:

A handwritten signature in black ink, appearing to read 'Adesh Bhargava', is written over a horizontal line.

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